

Amendments to the Claims:

Please amend the claims as follows:

Claim 1 (Currently amended): A delivery device for delivering a metered amount of substance on each actuation thereof, comprising:

a delivery unit (2) operable to deliver a metered amount of substance, the delivery unit (2) including a piston member (43) which, in a reciprocating movement, primes, meters and delivers a metered amount of substance; and

an actuation mechanism (3) actuatable by a user to operate the delivery unit (2), the actuation mechanism (3) comprising an actuator member (53) to which a user applies an actuation force (6) in substantially a single direction, and being configured to effect the reciprocating movement of the piston member (43) on application of the actuation force (6).

Claim 2 (Currently amended): The device of claim 1, wherein the delivery unit (2) comprises a metering cavity (35) in fluid communication with a reservoir (23) for storing substance, and the piston member (43) is reciprocatingly movably disposed in the metering cavity (35) along a piston axis, the piston member (43) being movable in a first direction to a first, primed position to draw substance into the metering cavity (35) and thereby prime the delivery unit (2), and a second direction, opposite to the first direction, to a second, delivered position to meter and deliver a metered amount of substance from the metering cavity (35).

Claim 3 (Currently amended): The device of claim 2, wherein the actuation mechanism (3) further comprises a gear assembly (57) which is operably coupled to the piston member (43) and the actuator member (53) such as to effect the reciprocating movement of the piston member (43) on application of the actuation force (6) to the actuator member (53).

Claim 4 (Currently amended): The device of claim 3, wherein the gear assembly (57) comprises a first, drive gear (74) which is rotatable about a pivot (73) and driven by actuation of the actuator member (53), and a second, driven gear (74) which is

rotatable about a pivot (78), driven by the drive gear (74) and operably coupled to the piston member (43).

Claim 5 (Currently amended): The device of claim 4, wherein the actuation mechanism (89) further comprises a drive member (66) which operably couples the piston member (43) and the driven gear (74).

Claim 6 (Currently amended): The device of claim 5, wherein the drive member (66) is pivotally mounted about a pivot (84) such as to be reciprocatingly pivoted by the driven gear (74).

Claim 7 (Currently amended): The device of claim 6, wherein the drive member (66) is configured such that the piston member (43) is moved at a greater speed in the second direction during a delivery stroke in which substance is delivered from the metering cavity (35) than in the first direction during a priming stroke over a length equal to the delivery stroke in which substance is drawn into the metering cavity (35).

Claim 8 (Currently amended): The device of claim 7, wherein the pivot (84) of the drive member (66) is located in a position offset from an axis extending through the pivot (78) of the driven gear (74) and orthogonal to the piston axis.

Claim 9 (Currently amended): The device of ~~claim 6~~ any of claims 6-8, wherein the driven gear (74) includes a drive pin (79) on a face thereof which engages the drive member (66).

Claim 10 (Currently amended): The device of ~~claim 3~~ any of claims 3-9, wherein the drive gear (74) includes n lugs (76a, 76b, 76c) on a face thereof, the lugs (76a, 76b, 76c) being equi-angularly spaced and having an angular spacing (82) of $360/n$ degrees, and the actuator member (63) is configured to rotate the drive gear (74) through $360/n$ degrees on each actuation thereof.

Claim 11 (Currently amended): The device of claim 10, wherein the driven gear {74} has a diameter of 1/n of that of the drive gear {71} such that, for each actuation of the actuator member {53}, the driven gear {74} is rotated through 360 degrees.

Claim 12 (Currently amended): The device of ~~claim 2 or claims 2 to 11~~, wherein the metering cavity {35} includes a peripheral wall {36} and the piston member {43} includes a piston {45} which is a sealing fit with the peripheral wall {36} of the metering cavity {35}, the piston {45} having a pressure face for acting on the substance.

Claim 13 (Currently amended): The device of claim 12, wherein the peripheral wall {36} of the metering cavity {35} includes a transfer port {39}, the transfer port {39} being located at a position between the positions of the pressure face of the piston {45} when the piston member {43} is in the primed and delivered positions, and providing for the transfer of substance from the metering cavity {35} to the reservoir {33} with movement of the piston member {43} in the second direction until closed by the piston {45}.

Claim 14 (Currently amended): The device of claim 13, wherein, prior to actuation of the actuator member {53}, the piston member {43} is located such as to close the transfer port {39}.

Claim 15 (Currently amended): The device of claim 14, wherein, prior to actuation of the actuator member {53}, the piston member {43} is located such as to close the metering cavity {35} from an external environment.

Claim 16 (Currently amended): The device of ~~claim 1 or claims 1 to 15~~, further comprising:

a storage unit {3} including a reservoir {32} for storing substance in fluid communication with the delivery unit {7}.

Claim 17 (Currently amended): The device of ~~claim 1~~ any of claims 1 to 16, further comprising:

an outlet unit Θ in fluid communication with the delivery unit Θ from which substance is delivered.

Claim 18 (Currently amended): The device of claim 17, wherein the outlet unit Θ comprises a spray nozzle.

Claim 19 (Currently amended): A delivery device for delivering a metered amount of substance on each actuation thereof, comprising:

a delivery unit Θ operable to deliver a metered amount of substance, wherein the delivery unit Θ comprises a metering cavity $\Theta\Theta$ in fluid communication with a reservoir $\Theta\Theta\Theta$ for storing substance, and a piston member $\Theta\Theta\Theta\Theta$ reciprocatingly movably disposed in the metering cavity $\Theta\Theta\Theta$ along a piston axis, the piston member $\Theta\Theta\Theta\Theta$ being movable in a first direction to a first, primed position to draw substance into the metering cavity $\Theta\Theta\Theta$ and thereby prime the delivery unit Θ , and a second direction, opposite to the first direction, to a second, delivered position to meter and deliver a metered amount of substance from the metering cavity $\Theta\Theta\Theta$; and

an actuation mechanism Θ actuatable by a user to operate the delivery unit Θ , the actuation mechanism Θ comprising an actuator member $\Theta\Theta\Theta\Theta\Theta$ to which a user applies an actuation force Θ , and being configured to effect the reciprocating movement of the piston member $\Theta\Theta\Theta\Theta$ on application of the actuation force Θ , with the piston member $\Theta\Theta\Theta\Theta$ being moved at a greater speed in the second direction during a delivery stroke in which substance is delivered from the metering cavity $\Theta\Theta\Theta$ than in the first direction during a priming stroke over a length equal to the delivery stroke in which substance is drawn into the metering cavity $\Theta\Theta\Theta$.

Claim 20 (Currently amended): The device of claim 19, wherein the actuator member $\Theta\Theta\Theta\Theta\Theta$ is configured such that a user applies the actuation force Θ in substantially a single direction.

Claim 21 (Currently amended): The device of claim 19 or 20, wherein the actuation mechanism $\langle 9 \rangle$ further comprises a gear assembly $\langle 52 \rangle$ which is operably coupled to the piston member $\langle 43 \rangle$ and the actuator member $\langle 53 \rangle$ such as to effect the reciprocating movement of the piston member $\langle 43 \rangle$ on application of the actuation force $\langle 9 \rangle$ to the actuator member $\langle 53 \rangle$.

Claim 22 (Currently amended): The device of claim 21, wherein the gear assembly $\langle 52 \rangle$ comprises a first, drive gear $\langle 74 \rangle$ which is rotatable about a pivot $\langle 75 \rangle$ and driven by actuation of the actuator member $\langle 53 \rangle$, and a second, driven gear $\langle 74 \rangle$ which is rotatable about a pivot $\langle 75 \rangle$, driven by the drive gear $\langle 74 \rangle$ and operably coupled to the piston member $\langle 43 \rangle$.

Claim 23 (Currently amended): The device of claim 22, wherein the actuation mechanism $\langle 9 \rangle$ further comprises a drive member $\langle 55 \rangle$ which operably couples the piston member $\langle 43 \rangle$ and the driven gear $\langle 74 \rangle$.

Claim 24 (Currently amended): The device of claim 23, wherein the drive member $\langle 55 \rangle$ is pivotally mounted about a pivot $\langle 74 \rangle$ such as to be reciprocatingly pivoted by the driven gear $\langle 74 \rangle$.

Claim 25 (Currently amended): The device of claim 24, wherein the pivot $\langle 74 \rangle$ of the drive member $\langle 55 \rangle$ is located in a position offset from an axis extending through the pivot $\langle 75 \rangle$ of the driven gear $\langle 74 \rangle$ and orthogonal to the piston axis.

Claim 26 (Currently amended): The device of claim 21 ~~any of claims 23 to 26~~, wherein the driven gear $\langle 74 \rangle$ includes a drive pin $\langle 79 \rangle$ on a face thereof which engages the drive member $\langle 55 \rangle$.

Claim 27 (Currently amended): The device of claim 22 ~~any of claims 22 to 26~~, wherein the drive gear $\langle 74 \rangle$ includes n lugs $\langle 76a, 76b, 76c \rangle$ on a face thereof, the lugs $\langle 76a, 76b, 76c \rangle$ being equi-angularly spaced and having an angular spacing $\langle \theta \rangle$ of

360/n degrees, and the actuator member {53} is configured to rotate the drive gear {44} through 360/n degrees on each actuation thereof.

Claim 28 (Currently amended): The device of claim 27, wherein the driven gear {34} has a diameter of 1/n of that of the drive gear {44} such that, for each actuation of the actuator member {53}, the driven gear {34} is rotated through 360 degrees.

Claim 29: (Currently amended): The device of claim 19 ~~any of claims 19 to 23~~, wherein the metering cavity {35} includes a peripheral wall {36} and the piston member {43} includes a piston {45} which is a sealing fit with the peripheral wall {36} of the metering cavity {35}, the piston {45} having a pressure face for acting on the substance.

Claim 30 (Currently amended): The device of claim 29, wherein the peripheral wall {36} of the metering cavity {35} includes a transfer port {39}, the transfer port {39} being located at a position between the positions of the pressure face of the piston {45} when the piston member {43} is in the primed and delivered positions, and providing for the transfer of substance from the metering cavity {35} to the reservoir {23} with movement of the piston member {43} in the second direction until closed by the piston {45}.

Claim 31 (Currently amended): The device of claim 30, wherein, prior to actuation of the actuator member {53}, the piston member {43} is located such as to close the transfer port {39}.

Claim 32 (Currently amended): The device of claim 31, wherein, prior to actuation of the actuator member {53}, the piston member {43} is located such as to close the metering cavity {35} from an external environment.

Claim 33 (Currently amended): The device of claim 19 ~~any of claims 19 to 23~~, further comprising:

a storage unit (3) including a reservoir (33) for storing substance in fluid communication with the delivery unit (3).

Claim 34: The device of claim 19 ~~any of claims 19 to 33~~, further comprising:
an outlet unit (5) in fluid communication with the delivery unit (3) from which substance is delivered.

Claim 35 (Currently amended): The device of claim 34, wherein the outlet unit (5) comprises a spray nozzle.

Claim 36 (Cancelled)